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10/810,049	03/26/2004	Graziano Marusi	043001/0024 SBP/CEC/JEL	7895
7590	04/06/2006		EXAMINER NGUYEN, THONG Q	
Steven B. Pokotilow Stroock & Stroock & Lavan LLP 180 Maiden Lane New York, NY 10038			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/810,049

Applicant(s)

MARUSI ET AL.

Examiner

Thong Q. Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The present Office action is made in response to the amendment filed on 1/18/06. It is noted that in the amendment, applicant has made changes to the specification, the drawings and the claims. Regarding to the claims, applicant has amended claim 1 and added claims 16-26.
2. A review of the newly-added claims 16-26 has resulted that the device and the method as claimed in the newly-added claims have the similar scope as that of the device previously claimed, thus all of pending claims 1-26 are examined in this Office action.

### ***Drawings***

3. The drawings contained one sheet of fig. 7 was received on 1/18/06. These drawings are approved by the Examiner. As a result of entering the new sheet contained figure 7, the application now contains seven sheets of figures 1-7.

### ***Specification***

4. The lengthy specification which was amended by the amendment of 1/18/06 has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

Art Unit: 2872

of the following is required: The specification has not provided a proper antecedent basis for the following features which are recited in the claims.

First, the feature related to the number of layers up to 100 layers as recited in claim 10;

Second, the feature related to the activation value which is greater than 90 % and 97% of the photochromic lens as recited in claims 12 and 13, respectively.

Third, the feature related to the color appearance when observed from a side opposite from the photochromic lens as recited in the amended claim 1, and the feature related to the mirror like or silver like appearance when observed from a side opposite from the photochromic lens as recited in the newly-added claims 16-18.

### ***Claim Objections***

6. Claims 1-3 are objected to because of the following informalities. Appropriate correction is required.

In each of claims 1-3, it is unclear about the term "UVA" recited in the claim. Should the claim be amended to provide a definition or an explanation for the mentioned term?

### ***Double Patenting***

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to

Art Unit: 2872

identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claim 2 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### ***Claim Rejections - 35 USC § 102***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-4, 6, 10 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Melzig et al (U.S. Patent No. 4,852,974).

Melzig et al disclose an antireflection multilayered film for use with an optical lens having photochromic properties. The film as described in column 3 and shown in figures 1 and 5 comprises seven dielectric layers of alternative low and high refractive indices which in combination has a reflectance level of 10% or less for light of wavelengths from 325 to 400 nm, and has a reflectance level higher than

30% for light of wavelength 275 to 325 nm. In particular, the multilayered film provided by Melzig et al has a reflectivity of less than 5% for the bandwidth around the wavelength of 350 nm, and has a reflectivity of larger than 30% in the bandwidth around the wavelength of 290 nm. The material of the layers having low refractive index is  $\text{SiO}_2$  and the materials of the layers having high refractive index is  $\text{Ti}_2\text{O}_3$  as can be seen in column 3, Table 2. Regarding to the number of layers in the film, it is noted that the number of layers in the embodiment 1 described in column 2, Table 1 is five layers and the number of layers in the embodiment 2, Table 2 is seven layers which meets the features recited in present claim 10. Applicant should note that it was decided in the Courts that "the disclosure in the prior art of any value within a claimed range is an anticipation of that range." See *In re Wertheim*, 541 F. 2d 257, 191 USPQ 90 (CCPA 1976); *Titanium Metals Corporation of America*, 227 USPQ 773 (Fed. Cir. 1985); *In re Petering*, 301 F. 2d 676, 133 USPQ 275 (CCPA 1962).

As a result of such a structure, the optical device as provided by Melzig et al has a colored appearance when observed from a side opposite from the photochromic lens when light in the bandwidth around the wavelength of 290 nm incident onto the lens. Applicant should note that the claim 1 recites that the invention has a colored appearance; however, the claim does not provide any specific limitation/feature related to the wavelengths in which the invention has a colored appearance as well as the level (or value) of the reflectivity of the invention. The claim also does not specific the kind of color in which the invention

exhibits. Applicant should also note that "color" as defined by the Webster's II Dictionary is "That aspect of things caused by differing qualities of the light reflected or emitted by them." or "The characteristics of light by which the individual is made aware of objects or light sources through the ocular receptors, described in terms of dominant wavelength, luminance, and purity." In the light of such definition then the value of 30% of reflectivity provided by the device of Melzig et al yields a colored appearance in a mirror like or silver like manner. Applicant is respectfully invited to review the specification in pages 9-10 and fig. 6 which discloses an embodiment of the invention which embodiment has the similar features as that disclosed by Melzig et al. In particular, in the embodiment described in pages 9-10 and shown in fig. 6, applicant has disclosed four layers made by  $\text{TiO}_2$  and  $\text{SiO}_2$  wherein the layers yields a reflectivity of larger than 30% for wavelengths around 330 nm and has a reflectivity of less than 10% for wavelengths in the range of 400-740 nm.

***Claim Rejections - 35 USC § 103***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
12. Claims 5, 7, 19-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melzig et al in view of Andreani et al.

The antireflection multilayered film for use with an optical lens which has a reflectance level of less than 5% for the bandwidth around the wavelength of 350 nm, and has a reflectivity of larger than 30% in the bandwidth around the

Art Unit: 2872

wavelength of 290 nm as provided by Melzig et al does not disclose that the material having high refractive index is  $\text{TiO}_2$  as claimed in present claims 5, 19 and 24 or  $\text{ZrO}_2$  as claimed in present claim 7. However, the use of material of  $\text{TiO}_2$  and  $\text{ZrO}_2$  for a layer of a high refractive index in a multilayered film in the range of 300-400 nm is known to one skilled in the art as can be seen in the antireflection multilayered film provided by Andreani et al. In particular, in the antireflection multilayered film described in column 5, Andreani et al disclose that the material used in the layer of high refractive index is selected from a group of  $\text{TiO}_2$ ,  $\text{Ti}_2\text{O}_3$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{ZrO}_2$ , etc...and the material used in the layer of low refractive index is selected from a group of  $\text{SiO}_2$ ,  $\text{MgF}_2$ , ... Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the antireflection multilayered provided by Melzig et al by using material of  $\text{TiO}_2$  or  $\text{ZrO}_2$  for the layer of high refractive index as suggested by Andreani et al for the purpose of satisfying a particular application. Applicant should also note that it was decided in the Courts that a selection of known material based on its suitability for the intended use is a matter of obvious design choice. See *In re Leshin*, 125 USPQ 416.

Regarding to the method as recited in claim 24, while the combined product does not clearly set forth the step of creating a colored photochromic lens; however, it would have been obvious to one skilled in the art at the time the invention was made to make the combined product as provided by Melzig et al and Andreani et al by alternatively applying a plural layers made by high refractive material of



TiO<sub>2</sub> or ZrO<sub>2</sub>, and low refractive material of SiO<sub>2</sub> on a photochromic lens for the purpose of obtaining a photochromic lens wherein the layers do not adversely affect the original photochromic activity of the lens.

13. Claims 8-9, 18, 23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melzig et al.

The antireflection multilayered film for use with an optical lens which has a reflectance level of less than 5% for the bandwidth around the wavelength of 350 nm, and has a reflectivity of larger than 30% in the bandwidth around the wavelength of 290 nm as provided by Melzig et al does not disclose that the number of layers in the film is four or twelve as claimed in present claims 8-9, 18, 23 and 25-26. However, the number of layers of the film as claimed is merely that of preferred embodiment and no criticality has been disclosed. The support for that conclusion is found in the present specification in which applicant has declared that the number of layers is not critical/important as can be seen in the present specification in page 10, section [0030]. It is also noted that such a non-criticality of the number of layers is indeed claimed in the present claims. For instance, the number of layers can be four as claimed in present claim 10. Thus, absent of any criticality, it would have been obvious to one skilled in the art at the time the invention was made to modify the antireflection multilayered film provided by Melzig et al by using any combination of numbers of layers as desired for the purpose of adjusting the ability of antireflection light of the film.

Art Unit: 2872

14. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melzig et al in view of Andreani et al.

The antireflection multilayered film for use with an optical lens as provided by Melzig et al and Andreani et al does not explicitly state that the multilayered film has an activation value greater than 25% or equal to the activation value of a photochromic lens as claimed in present claims 11-15. However, such features are considered as an inherent feature from the use of a multilayered film provided by Melzig et al and Andreani et al. The support for that conclusion is found in the structure of the multilayered film provided by Melzig et al and Andreani et al comprises a number of alternative low and high refractive indices with the materials of SiO<sub>2</sub> and TiO<sub>2</sub> which is identical to the structure of the film as recited in the present claims. Since a similarity and/or identity in structure will yield the same function and/or result, one skilled in the art will expect that the activation value of the film provided by Melzig et al and Andreani et al is greater than 25% of the activation value of the photochromic lens. If it is not inherent then one skilled in the art will recognize that the change in the activation value of the film with respect to that of a photochromic lens is able to obtain by just adjusting the number of layers and/or the thickness of the layers used to constitute the film. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the antireflection multilayered film provided by Melzig et al and Andreani et al by adjusting the number of layers and/or the thickness of the layers used to constitute the antireflection

multilayered film for the purpose of adjusting the activation value of the film with respect to that of the lens which lens is coated by such film.

***Response to Arguments***

15. Regarding to the objections to the specification as failing to provide a proper antecedent basis for the features recited in claims 10 and 12-13, applicant's arguments filed on 1/18/06, page 11, have been fully considered but they are not persuasive.

First, regarding to the objection to the specification that the specification does not provide a proper antecedent basis for the feature related to the number of layers up to 100 layers as recited in claim 10, applicant has argued that the specification in section [003] contains a support. The Examiner respectfully disagrees. Applicant should note that the section [0003] describes the layers of the prior art, not the invention. In the invention as described in pages 3-11, applicant has provided three embodiments in which the number of layers are 12, 12 and 4 for embodiment 1, 2 and 3, respectively. The specification does not contain information to state that the number of layers is up to 100 as claimed.

Second, regarding to the objection to the specification that the specification fails to provide a proper antecedent basis for the feature related to the activation value which is greater than 90 % and 97% of the photochromic lens as recited in claims 12 and 13, respectively, applicant has argued that Table 1-3 do provide support for the features claimed. The Examiner respectfully disagrees. The percent of activation of the coated lens, i.e., the invention, as shown in Tables 1-3 are substantially equal to the percent of activation of the uncoated lens which

has a relative value of 52%. There is not any description or information in the specification to support for the feature that the activation value of the photochromic lens is greater than 90 % and 97% as claimed.

Regarding to the objection to the specification that the specification does not provide a proper antecedent basis for the feature related to the color appearance when observed from a side opposite from the photochromic lens as recited in the amended claim 1, and the feature related to the mirror like or silver like appearance when observed from a side opposite from the photochromic lens as recited in the newly-added claims 16-18. Applicant should note that in the sections [0012]-[0013] refer to the color of the reflection of the lens or a mirrored look; however, such a description does not support for the feature that the color appearance is occurred when observed from a side opposite from the photochromic lens (Examiner's emphasis).

16. Regarding to the objection to claim 2 under 37 CFR 1.75 as being a substantial duplicate of claim 1 set forth in the previous Office action (see Office action of 7/18/05, page 5) and is now repeated in this Office action, it is noted that applicant has not amended or canceled the claim 2 and also not provided any explanation to overcome the objection to claim 2.

17. Regarding to the objection to claims 1-3 for the reason that the term "UVA" is unclear and the suggestion to the applicant to provide a definition or an explanation for the mentioned term as set forth in the previous Office action, it is noted that while the

Art Unit: 2872

applicant has amended the specification by adding an explanation for the term "UVA"; however, applicant has not amend claims 1-3 to overcome the objection to the claims.

18. Regarding to the rejections of claims 1-15 under 35 USC 102(b) and 35 USC 103(a) over the art of Biro et al, the amendments to claim 1 is sufficient to overcome the rejections, and thus all rejections to the claims over the art of Biro et al are now withdrawn.

19. Regarding to the rejection of claims 1-4, 6 and 10, now applied to claims 1-4, 6, 10 and 16-17, under 35 USC 102(b) over the art of Melzig et al, the amendments to claim 1 are not sufficient to make the device claimed different from the device of the applied art. Applicant's arguments as provided in the amendment of 1/18/06, pages 12-13, have been fully considered but they are not persuasive.

Applicant has argued that Melzig et al does not disclose that the plurality of layers on the photochromic lens has a colored appearance when observed from a side opposite from the photochromic lens. The Examiner respectfully disagrees with the applicant's viewpoint. Applicant is respectfully invited to review the device as described in column 2 and shown in fig. 7 in the Patent issued to Melzig et al.

The device as described in column 3 and shown in figures 1 and 5 comprises seven dielectric layers of alternative low and high refractive indices which in combination has a reflectance level of 10% or less for light of wavelengths from 325 to 400 nm, and has a reflectance level higher than 30% for light of wavelength 275 to 325 nm. In particular, the multilayered film provided by Melzig

et al has a reflectivity of less than 5% for the bandwidth around the wavelength of 350 nm, and has a reflectivity of larger than 30% in the bandwidth around the wavelength of 290 nm. The material of the layers having low refractive index is  $\text{SiO}_2$  and the materials of the layers having high refractive index is  $\text{Ti}_2\text{O}_3$  as can be seen in column 3, Table 2.

As a result of such a structure, the optical device as provided by Melzig et al has a colored appearance when observed from a side opposite from the photochromic lens when light in the bandwidth around the wavelength of 290 nm incident onto the lens. Applicant should note that the claim 1 recites that the invention has a colored appearance; however, the claim does not provide any specific limitation/feature related to the wavelengths in which the invention has a colored appearance as well as the level (or value) of the reflectivity of the invention. The claim also does not specific the kind of color in which the invention exhibits. Applicant should also note that "color" as defined by the Webster's II Dictionary is "That aspect of things caused by differing qualities of the light reflected or emitted by them." or "The characteristics of light by which the individual is made aware of objects or light sources through the ocular receptors, described in terms of dominant wavelength, luminance, and purity." In the light of such definition then the value of 30% of reflectivity provided by the device of Melzig et al yields a colored appearance in a mirror like or silver like manner. Applicant is respectfully invited to review the specification in pages 9-10 and fig. 6 which discloses an embodiment of the invention which embodiment has the

Art Unit: 2872

similar features as that disclosed by Melzig et al. In particular, in the embodiment described in pages 9-10 and shown in fig. 6, applicant has disclosed four layers made by  $\text{TiO}_2$  and  $\text{SiO}_2$  wherein the layers yields a reflectivity of larger than 30% for wavelengths around 330 nm and has a reflectivity of less than 10% for wavelengths in the range of 400-740 nm.

20. Regarding to the rejections of claims 5, 7-9, and 11-15, now applied to claims 5, 7-9, 11-15 and 18-26, under 35 USC 103(a) over the art of Melzig et al and Andreani et al, it is noted that since the applicant has not provided any specific argument, and thus the claims are still rejected for the same reasons as set forth in the previous Office action and repeated in this Office action.

### ***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

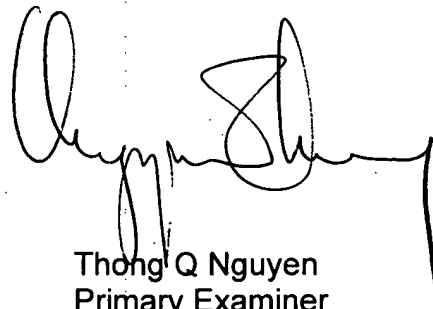
Art Unit: 2872

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thong Q. Nguyen', is positioned above the printed name and title.

Thong Q Nguyen  
Primary Examiner  
Art Unit 2872

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Entry approved  
3/21/06

App'n. No. 10/310,049  
Response Dated August 16, 2005  
Response to Office Action dated January 18, 2006  
New Sheet 1 of 1

FIG. 7

